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THE MORE IMPORTANT RECORDS FOR SEPTEMBER, 1932

The situation with respect to the principal insects attacking field crops, including grasshoppers, white grubs, Hessian fly, chinch bug, and corn ear worm, has not materially changed since our September 1st report.

Two flower beetles (Euphoria inda L. and E. sepulchralis Fab.) were attracting attention by injuring vegetables and flowers throughout the Mississippi Valley region from North Dakota to the Gulf.

The southern corn stalk borer was reported as unusually abundant in North Carolina, as high as 95 per cent of the stalks in some fields being infested, and in some instances heavy infestation caused considerable breakage of stalks.

What is believed to be the beet webworm seriously infested alfalfa fields in Duchesne and Uintah Counties, Utah, this year. This is the only serious outbreak of this insect in this State during the past ten years.

From present indications it appears that the plum curculio will hibernate this fall in greater numbers than it did last year in Georgia.

Probably in consequence of the continued rainfall deficiencies over parts of the East Central States, damage by the shot-hole borer is decidedly more prevalent in deciduous orchards than usual in that region.

A red spider (Tetranychus pacificus McG.) has apparently extended its range from San Joaquin and Stanislaus Counties to Fresno, Tulare, and Kern Counties in California. This insect is one of the serious vinifera grape pests.

An unusually heavy population of the pecan leaf case bearer is entering hibernation in southern Georgia, indicating serious infestations next spring.

A new infestation of the citrus whitefly has been found about 4 miles northeast of the infestation at Pasadena, Calif., discovered last summer.

Blister beetles continued to be very destructive to truck and ornamental crops along the south Atlantic seaboard and in the lower Mississippi Valley.

The banded cucumber beetle is occurring in very destructive numbers in Louisiana, Mississippi, Alabama, and Georgia, where it is damaging beans, sweet-potatoes, and other truck crops.

The Mexican bean beetle has been found as far north as central New Hampshire and has been destructively abundant farther north in Indiana than during any previous year.

The cabbage webworm was causing considerable damage throughout the South Atlantic and Gulf States.

Fall webworms (Hyphantria cunea Drury and H. textor Harr.) were reported as unusually prevalent throughout the New England, Middle Atlantic, South Atlantic, East Central, and Lower Mississippi Valley States.

A very heavy infestation of forest trees by walkingsticks resulting in severe defoliation was reported from limited areas in southern Pennsylvania.

THE MORE IMPORTANT ENTOMOLOGICAL FEATURES IN CANADA FOR AUGUST AND SEPTEMBER, 1932

Combative measures against grasshoppers were carried out over a wide territory in the Prairie Provinces. A survey of the situation in Manitoba, where the outbreak is most severe, showed that while large areas of crops had been saved through the application of poisoned bait, considerable damage has been done in some localities, not only to grain crops, but also to fodder and market garden crops. Surveys by provincial and federal officers are being continued in the three affected provinces. Throughout British Columbia grasshoppers continue unusually scarce.

Wireworms have caused much damage in Saskatchewan, particularly in the territory northeast of Saskatoon, where they appear to be increasing.

The infestation of white grubs is heavier over eastern Ontario than in the southern and central parts of Quebec. The grubs are in the destructive second-year stage in the latter province and are causing heavy damage to crops.

The bertha armyworm is recorded for the first time from the Pacific coast region of British Columbia, at Massett, Queen Charlotte Islands.

Present indications are that unless control measures are taken this fall, there will be a serious outbreak of the Hessian fly in Ontario next year.

The corn ear worm is effecting marked damage to canning corn in sections of southern Ontario.

Heavy infestations of the wheat stem sawfly are reported from parts of Manitoba and Saskatchewan. In the latter province the wheat stem maggot occurs generally and is causing moderate damage.

The gladiolus thrips continues to be a serious pest of gladioli in Ontario. It is reported to be more noticeable in southern Quebec than was the case last year.

A European mirid, Melanotrichus concolor Kirsch, has been taken for the first time in Canada, at Nanaimo, B. C. This insect attacks broom, which is more or less of a pest in the region where the insect has been found.

The outbreak of sod webworms (Crambus spp.), which caused material damage to lawns and grass sod in southwestern Ontario in 1931, appears to have completely subsided, no infestations having been found this season.

The Mexican bean beetle is occurring in many localities in southern Ontario. It is more prevalent than previously recorded, and in some instances has caused quite severe damage in market gardens. Weather conditions have been favorable to its development this year.

Indications point to a more than usually heavy infestation of the imported cabbage worm in Ontario with resulting severe damage to cruciferous crops.

A marked reduction in the amount of codling moth injury in the Niagara district, Ont., is believed probable, as weather conditions have been unfavorable to the insect. In unsprayed orchards of eastern Ontario, however, damage to fruit by this species is quite striking.

In the Gaspe Peninsula of Quebec only a small percentage of the larvae of the European sawfly Diprion polytomum Hart., which overwintered in cocoons in the ground, emerged this year. Defoliation of white and black spruce is much lighter this season than in 1931. A serious outbreak of the eastern spruce beetle has developed over a large part of this territory.

The balsam woolly aphid is spreading in the Maritime Provinces, and the associated gout disease has become general in Nova Scotia.

The infestation of the beech scale continues to develop in Nova Scotia and southern New Brunswick and many trees are dying, particularly in western Nova Scotia.

The walnut caterpillar is very prevalent in southern Ontario, where the majority of black walnut trees have been partially or wholly defoliated by this insect.

In certain localities in Manitoba and Saskatchewan, willows and poplars have suffered severe defoliation by the willow leaf beetle. In sandy sections of Manitoba an outbreak of the aspen poplar leaf beetle has occurred.

There are indications that the severe outbreak of bark beetles in yellow pine in the Aspen Grove area of British Columbia is now subsiding.

G E N E R A L F E E D E R S

GRASSHOPPERS (Acrididae)

South Carolina. F. Sherman (September 24): Fields near Clemson College were stripped by Schistocerca americana Drury the latter part of August.

Florida. J. R. Watson (September 24): Grasshoppers, S. americana, are very abundant over all northern Florida.

Ohio. T. H. Parks (August 29): Melanoplus femur-rubrum DeG. and M. differentialis Thos. are moderately abundant on clover and in meadows. (September 21): Grasshoppers are more abundant than usual.

Indiana. J. J. Davis (September 27): Grasshoppers were reported destructive to cabbage at Jasper, September 4.

Wisconsin. E. L. Chambers (September 27): Grasshoppers have been checked by disease, parasites, and hard rains much earlier this year than last and they are very scarce in the sections where they were most abundant during midsummer, which is the area lying in the north central portion of the State.

Minnesota. A. G. Ruggles (September 26): Grasshoppers are moderately abundant in 50 counties.

North Dakota. T. T. Kristjanson (August 11): Much damage in Pierce County. The largest damage is in the northwestern part of the county covering 4 townships. A great many farms were a total failure, all feed crops and flax having been damaged. Grasshoppers are very numerous in places where they were not found 10 days ago. The damage is very largely to oats, barley, and flax.
J. A. Munro (September 20): There has been a marked reduction of adult M. bivittatus Say in the Fargo vicinity, due largely to the parasitic fly Sarcophaga kellyi Aldrich.

Iowa. H. E. Jaques (September): Grasshoppers are in evidence as usual throughout much of the State, but have done comparatively little damage.

Nebraska. M. H. Swenk (August 25-September 20): Only scattering reports of damage were received during the period here covered, and relatively few of them were from the counties that were so heavily infested in 1931 and early in the present year. The chief complaint during September was of the red-legged grasshopper (M. femur-rubrum) attacking the edges of fields of young alfalfa just coming up, or working on the edges of fields of broom grass that had been sown in August. These complaints came especially from Jefferson, Gage, and Lancaster Counties.

Kansas. H. R. Bryson (September 21): Very few reports of grasshopper injury in any part of the State. About the normal number of inquiries regarding methods for the control of the pest in newly sown alfalfa have been received.

Oklahoma. C. F. Stiles (September 3): Grasshoppers are still quite numerous in some southern and southwestern sections of the State.

Alabama. J. M. Robinson (September 22): Grasshoppers are moderately abundant in pastures in Auburn.

Mississippi. C. Lyle (September 23): A correspondent at Eden reported on August 25 severe injury to beans, peas, corn, and tomatoes.

Utah. C. J. Sorenson (June and July): Three separate swarms were observed which were separatedfrom each other by about 2 miles near Hayden, Uintah Co. The swarms remained together as such until near the middle of August, when they had disappeared from the area, probably scattering throughout the near-by cultivated areas. This is the first year that Camnula pellucida Scudd. has been observed or reported.
G. F. Knowlton (September 23): Many species of grasshoppers are scarce to moderately abundant and very abundant in some localities in northern Utah, where they are laying eggs.

New Mexico. J. R. Eyer (September 1): Grasshoppers are giving us considerable trouble this season.

California. S. Lockwood (September 21): During July and August C. pellucida destroyed the native clovers and much of the wild forage grasses on about 1,000 acres of Hope Valley, Alpine Co.

MORMON CRICKET (Anabrus simplex Hald.)

Utah. C. J. Sorenson (July 5 to July 23): The Mormon cricket has been present within a radius of 20 miles during the past 10 years, but has never invaded the Valley before. Heretofore the infestation has been restricted to the mountain and hillside areas. Invasion of the cultivated fields in the Jensen district was prevented this summer by the Green River forming a barrier to the insects. The cultivated crops, consisting, in the main, of garden crops, corn, and potatoes, on the half-dozen ranches located on the east side of the Green River were completely devoured by the migrating crickets within about three days. (Det. by W.W. Henderson.)

WHITE GRUBS (Phyllophaga spp.)

Southeastern United States. R. A. St. George (September 26): Reports from a nursery located near Raleigh, N. Car., indicate that the extensive injury that was caused by the activity of white grub larvae to the roots of pine seedlings during the early summer months has subsided during September. An examination of the soil revealed the percentage of large numbers of grubs which had been parasitized. Many wasps were found flying over the seed beds and digging into the ground during the month. Several were submitted for determination and were found to be Campsomeris (Trielis) octomaculata race hermione (Banks). They are known to be parasitic on white grub larvae. Several species of Phyllophaga larvae have been received from the vicinity.

Other reports from a nursery near Columbia, S. Car., indicate that the activity of the grubs may have been influenced somewhat by moisture conditions of the soil. A condition of droughthas been experienced during the early spring and summer months in the vicinity and very few grubs have been found. During last fall they were present in large numbers and very destructive. During August an examination of the soil to a depth of 4 feet did not reveal their presence.

During September, however, simultaneously with the first rains they were found within the first 3 inches of soil and became injurious again. During

1930 they were observed to be more numerous and destructive in one portion of this nursery than the rest and the only reason for this appeared to be the presence of a water faucet, around which the ground was observed to be somewhat more moist than in the rest of the nursery.

Pennsylvania. J. N. Knull (September 16): White grubs have been very abundant in the Mont Alto nursery this year. Japanese larch and red pine seemed to suffer most.

Ohio. T. H. Parks (September 21): White grubs are very abundant--worst in years.

Kentucky. M. L. Didlake (August 30): White grubs are very abundant--injury most severe in years.
W. A. Price (September 26): White grubs are moderately abundant on strawberries.

Illinois. J. H. Bigger (September): White grubs are very abundant in western Illinois. A survey indicates that they are more numerous than last period.

Michigan. R. Hutson (September 26): White grubs are very abundant in the vicinity of Battle Creek and Kalamazoo.

Wisconsin. E. L. Chambers (September 27): White grubs have been abundant in many sections of the State and have been found doing serious injury in some of our nurseries where the soil was not treated.
C. L. Fluke (September 26): White grubs are very abundant in Trempealeau, Rusk, Jefferson, Jackson, and Milwaukee Counties, Trempealeau being particularly heavily infested, in pasture and corn.

Nebraska. M. H. Swenk (September 20): White grubs are moderately abundant in bluegrass lawns in central Nebraska.

Virginia. C. R. Willey (September 26): I visited near Conicville, in Shenandoah County on September 23, observing grub-worms damaging corn and timothy. Found 3 to 5 white grubs in every hill of corn examined except several "good" hills in which we did not expect to find them. The field contained 7 acres and more than 99 per cent of the hills appeared infested. The farmer said many farms around him were as "bad off" as he. I was not able to scout further, but reported find to county agent located at Woodstock. This corn followed hay which had been down two years.

GREEN JUNE BEETLE (Cotinis nitida L.)

Indiana. J. J. Davis (September 27): Grubs were reported very abundant and destructive to lawns at Evansville, September 23.

WIREWORMS (Elateridae)

South Carolina. A. Luthen (September 24): Horistonotus uhleri Horn is very abundant in the southeastern part of the state.

Florida. K. L. Cockerham. (September 15): One specimen of Heteroderes laurentii Guer. was recently given to me from material from Gainsville. This specimen was collected December 31, 1931. It adds one more locality record for the State.

Colorado. G. M. List (September 20): Wireworms are moderately abundant in potato fields in Morgan County.

BUMBLE FLOWER BEETLES (Euphoria spp.)

Vermont. H. L. Bailey (September 27): Bumble flower beetle (E. inda L.) reported as plentiful on sweet corn in Rockingham.

Kentucky. M. L. Didlake (August 30): Fruit chafers (E. sepulchralis Fab. and E. inda) are injuring ears of corn, eating grains entirely off the cob, the two species being associated in one ear in every instance in Perry, Knott, Pike, Elliott, Floyd, and Lawrence Counties.

Wisconsin. C. L. Fluke (September 26): The bumble flower beetle (E. inda) is moderately abundant in Outagamie County; it is destroying willows.

North Dakota. J. A. Munro (September 20): E. inda was reported as prevalent during the latter part of August in Ward and Barnes Counties.

Kansas. H. R. Bryson (September 21): Diggings in cultivated and grass lands at Manhattan reveal the presence of a large number of grubs. As many as 15 per square feet have been found.

Alabama. J. M. Robinson (September 22): E. sepulchralis is moderately abundant in Empire on corn silks, in Danville on cotton bolls, and in Auburn on okra pods.

Mississippi. C. Lyle (September 23): A correspondent at Pinckeyville, Wilkinson Co., sent us on September 7 adults of E. sepulchralis with the following statement: "They are eating young corn, both the roots and leaves."

C E R E A L A N D F O R A G E - C R O P I N S E C T S

WHEAT

HESSIAN FLY (Phytophaga destructor Say)

New York. W. E. Blauvelt (August 24): Hessian Fly Survey, 1932:

County	Per cent Infestation	County	Per cent Infestation
Cayuga	9.33	Tompkins	9.1
Erie	11.5	Wayne	7.38
Genesee	10.4	Wyoming	8.88
Livingston	7.	Yates	4.
Monroe	9.33	Ontario	6.93
Niagara	15.2	Orleans	13.8
Onondaga	12.	Seneca	14.5

State average 9.95

Pennsylvania. E. J. Udine through C. C. Hill (August 22): Heavy infestations of the Hessian fly prevail throughout most of the State. A culm count from many

widely distributed samples showed a 32 per cent infestation for the State. The districts surveyed and infestations found in each district are as follows:

District No.	Per cent Infestation	District No.	Per cent Infestation
1	30	7	15
2	19	8	34
3	23	9	34
4	54	10	58
5	12	11	37
6	45	12	12

The districts are as follows: Dist. 1, Counties of Allegheny, Beaver, Butler, Crawford, Lawrence, Mercer, and Venango; Dist. 2, Counties of Armstrong, Cambria, Clarion, Clearfield, Indiana, and Jefferson; Dist. 3, Counties of Center, Clinton, and Lycoming; Dist. 4, Counties of Columbia, Montour, Northumberland, Snyder, and Union; Dist. 5, Counties of Carbon, Luzerne, Monroe, and Schuylkill; Dist. 6, Counties of Greene and Washington; Dist. 7, Counties of Fayette, Somerset, and Westmoreland; Dist. 8, Counties of Bedford, Blair, and Fulton; Dist. 9, Counties of Dauphin, Huntingdon, Juniata, Mifflin, and Perry; Dist. 10, Counties of Adams, Cumberland, Franklin, and York; Dist. 11, Counties of Berks, Dauphin, Lebanon, Lehigh, and Northampton; Dist. 12, Counties of Bucks, Chester, Lancaster, and Montgomery.

Delaware. E. J. Udine through C. C. Hill (July 30): Light infestationsoccurred throughout the State. The infestations found in each county are as follows:

County	Average Per cent Infestation
Kent	11
New Castle	9
Sussex	12
State average	10.6

Maryland. E. J. Udine through C. C. Hill (July 30): Heavy infestations were found throughout most of the wheat-growing districts of western Maryland and a culm count for this section showed a 32 per cent infestation. Light infestations occurred in the eastern shore, with an average infestation of culms of 10 per cent.

Virginia. J. S. Pinckney through C. C. Hill (June 30): A summer survey of different districts of this State showed the following infestations:

District No.	Per cent Infestation	District No.	Per cent Infestation
1	16	4	2
2	19	5	18
3	6	6	4
State infestation	10.8		

Counties in the various districts are: No. 1, Augusta, Frederick, Rockbridge, Rockingham, and Shenandoah; No. 2, Fairfax, Fauquier, Loudoun, and Prince William; No. 3, Caroline, Hanover, Louise, Orange, and Spotsylvania; No. 4, Essex, King George, Richmond, and West Moreland; No. 5, Smyth, Washington, and Wythe; No. 6, Campbell, Franklin, Halifax, Henry, and Pittsylvania.

North Carolina. J. S. Pinckney through C. C. Hill (June 30): A summer survey of the central part of the State showed wheat culms infested to the amount of 5 per cent. The section surveyed included the following:

County	Average per cent infestation
Catawba	3
Chatham	2
Davidson	11
Iredell	1
Randolph	6
Rowan	4
State infestation	4.5

Ohio. T. H. Parks (September 20): While we had three times as many flaxseeds present in the 1932 crop as in the crop of 1931, very few flies have yet emerged and only a small number of eggs have been laid. The late summer and fall have been very dry with no rains to moisten the flaxseeds and hasten pupation. We are stressing the safe sowing dates this year. Hessian flies are moderately abundant--most abundant since 1920 and more than average.

Michigan. R. Hutson (September 26): The Hessian fly is moderately abundant.

Iowa. H. E. Jaques (September): The Hessian fly is scarce in Osceola, Crawford, Adams, Madison, Warren, Monroe, and Henry Counties. It is moderately abundant in Harrison, Mills, Montgomery, and Clinton Counties.

Missouri. L. Haseman (September 27): Breeding cage records for central and southeastern Missouri indicate that the flies began emerging earlier than usual this fall. Parasites in central Missouri are very abundant. One sample shows 56 per cent flax seeds parasitized, 37 per cent dead of disease apparently, and only 7 per cent alive. Some breeding cages are giving us no adults at all.

Nebraska. M. H. Swenk (August 25 to September 20): In Nebraska there are two distinct areas of infestation with the Hessian fly. The eastern area includes southeastern Nebraska, west to about Webster, and Howard Counties, and north to Nance, Platte, and Douglas Counties, and the infestation is heaviest toward the western end of this area. The western area of infestation centers in Phelps and Kearney Counties, but takes in parts of the adjoining counties. Weather conditions in these two areas have been quite different during the summer, the August rainfall in the more eastern area having been almost twice the normal, while in the western area it was less than normal. As a result, over a large portion of southeastern Nebraska Hessian fly emergence to date (September 20) has been only a little later than normal. This has especially been true in some of the eastern and extreme southeastern counties, where normal or greater rainfall was received during the month of August. In general, the emergence in the counties west to Jefferson and Nance Counties, and thence northward, is not very far from normal, though in some of the included counties it may be a few days later. But there is a group of counties in south-central Nebraska where rainfall has been deficient and in these emergence has been delayed. According to our present information, in several counties west and south of Fillmore County emergence is delayed about as at our Fillmore County field observation station, where on September 20 about 25 per cent of the flies of the main fall brood had emerged. In a group of counties still farther south and west emergence is still more delayed, about as at our Phelps County field

observation station, where on September 20 only about 10 per cent of the flies had emerged. It is very likely that wheat sowing will need to be delayed more than usually late in these western areas this fall.

Kansas. H. R. Bryson (September 21): Observations regarding the abundance of Hessian fly at Manhattan. reveal the fact that a small early fall emergence gave rise to a very few flaxseedsin the volunteer wheat. A much larger emergence took place during the second week of September. Small larvae are present in the volunteer. Flaxseedshave been reported as abundant in voluntee wheat in south-central Kansas.

CORN

CORN EAR WORM (Heliothis obsoleta Fab.)

Maine. H. B. Peirson (September 8): Full grown larva taken at Bar Harbor.

Connecticut. B. H. Walden (September 24): Corn ear worm very abundant.

New Jersey. T. J. Headlee (September 6): The corn ear worm is very abundant.

Pennsylvania. J. N. Knull (September 1): The corn ear worm is moderately abundan in Franklin County.

North Carolina. W. A. Thomas (September 10): Several reports have reached the laboratory within the past few days indicating that this insect is doing considerable damage to snap beans by boring into pods before the beans are ready for harvest.

Ohio. T. H. Parks (September 20): These larvae are very abundant on sweet corn with almost every ear infested. A few of the worms were found feeding on tomato plants in a greenhouse near Cleveland.

Indiana. J. J. Davis (September 27): The corn ear worm was reported destructive to chrysanthemum buds in a greenhouse at Columbus, September 8.

Illinois. W. P. Flint (September 22): The corn ear worm has been extremely abundant in Illinois during September. Actual counts of the ears in the fiel in western Illinois showed 72 per cent infested.
J. H. Bigger (September): Corn ear worms are very abundant. A survey in 50 fields in Morgan County shows 53 per cent of ears infested during the first part of September.
M. D. Farrar (September): The corn ear worm is very abundant. Heavy flights of adults occurred the first two weeks of September.

Kentucky. W. A. Price (September 26): The corn ear worm is very abundant, and is responsible for much injury to corn, tomatoes, and dahlias.

Michigan. R. Hutson (September 26): The corn ear worm is very abundant.

Wisconsin. E. L. Chambers (September 27): The corn ear worm has been about as serious this fall as last fall on the late sweet corn and pop corn and they have gotten into a number of greenhouse establishments where they have proven very serious to chrysanthemums and roses.

Minnesota. A. G. Ruggles (September 26): The corn ear worm is very abundant around St. Paul and Minneapolis.

Iowa. H. E. Jaques (September): The corn ear worm has shown up abundantly in late corn.

Missouri. L. Haseman (September 27): Where rainfall has been difficient, a large population will again go into winter quarters, but the situation is less serious than last fall.

Kansas. H. R. Bryson (September 26): Late sweet corn at Manhattan is heavily infested.

Oklahoma. C. F. Stiles (September 23): The corn ear worm is very abundant in the greater part of the State. It is abundant in cotton bolls and in heads of grain sorghums.

Idaho. R. W. Haegele (September 21): In southwestern Idaho all field corn is badly infested. Approximately 80 to 90 per cent of the ears show some damage with the feeding seldom extending more than 1 inch back on the tip of the ear.

FALL ARMYWORM (Laphygma frugiperda S. & A.)

Florida. F. S. Chamberlin (September 6): The armyworm is prevalent over most of Gadsden County. Severe injury is confined to small areas at the present time.

Maryland. E. N. Cory (September 22): Fall armyworm reported in Cecil County.

STALK BORER (Papaipema nebris nitela Guen.)

New Jersey. T. J. Headlee (September 6): The stalk borer is moderately abundant.

Kentucky. W. A. Price (September 26): The stalk borer is moderately abundant on dahlias and corn.

Michigan. R. Hutson (September 26): The stalk borer is moderately abundant.

SOUTHERN CORN STALK BORER (Diatraea crambidoides Grote)

Virginia. H. G. Walker (September 27): The larger stalk borer is very abundant. Practically 100 per cent of the stalks are infested in some fields in Norfolk.

North Carolina. W. A. Thomas (September 21): Late corn at Chadbourn has been subjected to attacks to a greater extent this season than in former years. The injury has been so severe as to cause much of the corn to break off at the ground before reaching maturity. Fully 95 per cent of a field of corn near the laboratory was found to be infested.

CHINCH BUG (Blissus leucopterus Say)

Connecticut. R. B. Friend. (September 20): In three instances in New Haven the grass in large lawns has been almost entirely killed.

Ohio. T. H. Parks (September 15): Chinch bugs are very abundant in many cornfields of northwestern Ohio. The second generation is now from one-half to full grown and has caused some injury. We now have a population capable of doing very serious damage next year unless controlled.

Illinois. M. D. Farrar. (September): The chinch bug is moderately abundant in central Illinois but above normal for this area.
J. H. Bigger (September): Chinch bugs are very abundant. A chinch bug survey, September 1 to 10, indicates area of danger to next year's crops in all the central portion of Illinois andaconsiderable area on the western border of State, with possible danger of infestation in area between.

Wisconsin. E. L. Chambers (September 27): Chinch bugs in Pepin, Buffalo, Pierce, and Trempealeau Counties proved to be serious for the first time in many years and continued until the corn was cut for the silo.

Iowa. H. E. Jaques (September): Chinch bugs have been much in evidence in southern Iowa all summer and seem to threaten serious danger for next year.

Nebraska. M. H. Swenk (September 20): The chinch bug is moderately abundant in southeastern Nebraska.

Kansas. H. R. Bryson (September 21): The second generation was quite abundant in fields in south-central and eastern Kansas. Injury to sorghums was very much in evidence during August through Butler, Greenwood, Chase, Allen, Lyon, Anderson, Coffey, Franklin, and Miami Counties. The extremely dry weather in Butler County aided the bugs in their destruction. Chinch bugs of the second generation killed out a few of the more susceptible varieties of sorghums in the sorghum breeding nursery at the college farm this summer. A correspondence report from Hazelton, Barber County, also records chinch bugs injuring kafir.

CORN LEAF APHID (Aphis maidis Fitch)

North Carolina. W. A. Thomas (August 25): A very heavy infestation is now present on late corn at Chadbourn, attracting large numbers of Diptera and Hymenoptera on these plants. In some instances the leaves and stems of the corn plants are completely covered with aphids. This, no doubt, will somewhat reduce the yield of grain on the infested plants.

SAY'S STINK BUG (Chlorochroa sayi Stal)

New Mexico. J. R. Eyer (September 1): A recently reported pest is the grain bug (Chlorochroa sayi) which has appeared all over the State and is particularly injurious to kafir corn in western New Mexico.

ALFALFA

ALFALFA WEEVIL (Hypera postica Gyll.)

Utah. C. J. Sorenson (Season 1931 and 1932): Seven years ago the alfalfa weevil was practically unknown in the Uintah Basin. Since 1925 it has gradually spread and increased until practically every alfalfa field suffered considerable damage in 1932. The first serious damage for the Basin as a whole occurred in 1931.

California. A. E. Michelbacher (September 19): The alfalfa weevil at both Pleasanton and Niles can be found in about the same numbers as a month ago. Larvae in all stages of development can be collected. In the Pleasanton area the weevils are rather scarce, while around Niles they can be found rather easily.

BEET WEBWORM (Loxostege sticticalis L.)

Utah. C. J. Sorenson (July 3 to August 1): This is the first year within the past ten, at least, that this insect has been recognized as doing damage in alfalfa fields of Duchesne and Uintah Counties. Larvae and moths were present in varying numbers in practically all alfalfa fields. In about 10 or 15 fields, in widely separated areas, serious damage was done in fields of from 20 to 100 acres. Moths became very numerous beginning August 1, in the vicinity of these latter fields, and there were some moths in all fields after the latter date to September 1. Neither eggs nor larvae resulting from the August brood of moths could be found up to September 5.

F R U I T I N S E C T S

APPLE

CODLING MOTH (Carpocapsa pomonella L.)

Georgia. C. H. Alden (September 21): The codling moth is moderately abundant at Cornelia. Very few larvae are pupating under the bands. A few moths are being caught in the bait traps.

Ohio. T. H. Parks (September 21): The codling moth is moderately abundant--more so than average.

Illinois. W. P. Flint (September 22): The codling moth continued to emerge and enter apples during the first half of September. In many orchards more damage was done to Jonathan and Grimes during this period than at any other time during the year.

Kansas. H. R. Bryson (September 26): The codling moth has been unusually destructive in Kansas this season. This situation may be attributed to three things; namely, the heavy carry-over of moths from the 1931 season, weather conditions which were favorable to the moth, and a very light set of fruit.

Arkansas. D. Isely (September 26): The codling moth has been unusually destructive, probably causing a larger percentage of loss to the apple crop than in any year since 1918, with the possible exception of 1925.

Colorado. G. M. List (September 20): The codling moth is very abundant in Mesa County, and moderately abundant in other sections.

Idaho. R. W. Haegele (September 21): Injury is greater than normal in the fruit district of southwestern Idaho.

New Mexico. J. R. Eyer (September 1): Codling moths are giving us considerable trouble this season.

Washington. E. J. Newcomer (September 20): Since the middle of August the number of moths caught in baits has been considerably less than for the corresponding period in 1931. The total for the second brood was 8,800 in 1931 and only 5,600 in 1932. However, the percentage of infestation is about the same as last year, owing to light crops or, in some cases, less careful methods of control. The Jonathan crop is reported by horticultural inspectors to average 30 per cent wormy.

Oregon. D. C. Mote (August): Codling moths are reported in the Willamette Valley. The peak of egg deposition of the second brood was reached August 26.

California. H. J. Ryan (September 26): A large number of larvae hatched out late in the season. Codling moth control in pears in the Antelope Valley of northern Los Angeles County was much more satisfactory this season than last as was evidenced by the number of wormy fruits found by the packing houses this last month; control in walnuts was also satisfactory. In general pear orchards that were sprayed at least three times had less than 5 per cent wormy fruit. S. Lockwood (September 21): The codling moth has either been far more prevalent in pear orchards in the Sacramento delta district this year or control measures have been less effective, since the percentage of culled fruits has been much greater than heretofore.

FRUIT TREE LEAF ROLLER (Cacoecia argyrospila Walk.)

Pennsylvania. J. N. Knull (September 14): During the past season (1932) the V-marked leaf-roller has been abundant in the northeastern part of Pennsylvania. In many places there has been severe injury to the oak foliage.

APPLE SEED CHALCID (Syntomaspis druparum Boh.)

Maine. C. R. Phipps (September 22): The egg punctures are quite numerous in certain orchards.

APPLE CURCULIO (Tachypterellus quadrigibbus Say)

Minnesota. A. G. Ruggles and assistants (September): The apple curculio is very abundant in southeastern Minnesota.

APPLE MAGGOT (Rhagoletis pomonella Walsh)

Connecticut. P. Gorman (September 24): The apple maggot is present in New Haven County.

Minnesota. A. G. Ruggles and assistants (September): The apple maggot is very abundant in poorly sprayed orchards in Houston County.

APPLE APHID (Aphis pomi DeG.)

New York. N. Y. State Agr. Expt. Sta. (September 1): Aphis pomi is very abundant in western New York.

LEAFHOPPERS (Cicadellidae)

Maine. C. R. Phipps (September 22): Apple leafhoppers are very abundant in York and Cumberland Counties.

New Hampshire. L. C. Glover (September 22): Apple leafhoppers are moderately abundant.

Vermont. H. L. Bailey (September 27): Apple leafhoppers are very abundant at Topsham.

Connecticut. B. H. Walden (September 24): Apple leafhoppers are very abundant. P. Gorman (September 24): The apple leafhopper (Typhlocyba pomaria McA.) is present in New Haven and Hartford Counties; commercial control is not good.

New York. N. Y. State Agr. Expt. Sta. (September 1): Second-generation apple leafhoppers are now appearing and are very abundant in western New York.

Kentucky. M. L. Didlake (August 30): Apple leafhoppers are now abundant, although they were not numerous early in the season.

SAN JOSE SCALE (Aspidiotus perniciosus Comst.)

Illinois. M. D. Farrar (September): The San Jose scale is from moderately to very abundant in central Illinois. Fruit in many districts is showing light scale populations and there are a few areas where it is heavily infested.

Michigan. R. Hutson (September 26): The San Jose scale is very abundant.

Wisconsin. E. L. Chambers (September 27): The San Jose scale has been becoming more abundant and new infestations are being found every few weeks but all of them are located in some dozen southeastern counties. The scale has not as yet gotten into the commercial apple-growing sections.

Colorado. G. M. List (September 20): The San Jose scale has recently been found to infest several orchards quite heavily in Montezuma County. Previous to this it was known to exist only in Mesa and Delta Counties and has been kept well under control in these sections.

PEACH

PEACH BORER (Aegeria exitiosa Say)

Connecticut. P. Garman (September 24): The work of the peach tree borer is apparent in many orchards in New Haven County.

Virginia. H. G. Walker (September 27): The peach borer is moderately abundant in Norfolk.

Georgia. O. I. Snapp (September 20): The peak of moth emergence occurred in Fort Valley during the last week-end. Predators--mice or skunks, or both--have visited practically every peach orchard in this locality during recent months for pupae and we have found hundreds of empty cocoons near the base of peach trees which these predators have dug out of the ground or tree and eaten the pupae. The peach borer infestation should be greatly reduced this year on account of the activity of these predators.

Alabama. J. M. Robinson (September 22): The peach borer is moderately abundant on peaches.

Mississippi. C. Lyle and assistants (September): The peach borer is reported as abundant from Monroe, DeSoto, and Lee Counties, and moderately abundant from the greater part of the State.

ORIENTAL FRUIT MOTH (Grapholitha molesta Busck)

Connecticut. P. Garman (September 24): More abundant in northeastern portion of the State than elsewhere. New Haven and Fairfield Counties are reported to have low infestation.

New York. P. J. Parrott (September 22): Moderately to very abundant in western New York.

Pennsylvania. T. L. Guyton (September 24): The oriental fruit moth is scarce, about 5 per cent of the fruit being wormy in the Harrisburg district.

Georgia. O. I. Snapp (September 20): This insect has caused more than usual injury near the city limits of Fort Valley, but as usual there was practically no fruit infestation in this locality.
C. H. Alden (September 21): The oriental fruit moth is moderately abundant at Cornelia. Adults are still being caught in bait traps.

Ohio. T. H. Parks (September 15): The Elberta crop of Ottawa County was harvested with very little loss from oriental fruit moths. The crop was harvested the first week in September and matured too early to carry many larvae. Elberta, harvested in Lucas County ten days later, had from 20 to 30 per cent infestation but without any serious loss of fruit.

Illinois. W. P. Flint (September 22): There have been heavy flights of adults in the southern part of the State.

Kentucky. W. A. Price (September 26): The oriental fruit moth is moderately abundant.

Kansas. H. B. Hungerford (September): The oriental fruit moth was found for the first time in eastern Kansas.

Alabama. J. M. Robinson (August): The oriental fruit moth is moderately abundant in Brewton.

Mississippi. C. Lyle (September 23): Peach twigs injured by larvae were received during the past month from Copiah, George, Jasper, and Jefferson Counties. Severe injury was reported in some cases.

PLUM CURCULIO (Conotrachelus nenuphar Host.)

Georgia. O. I. Snapp (September 19): Jarring records show that adults are still in Fort Valley peach orchards, although the peach harvest has been over for two months. The curculio population has increased recently in some orchards as a result of the late emergence of first-generation adults, and from present indications more curculios will enter hibernation this fall than a year ago. First-generation adults deposited a few second-generation eggs during the latter part of August, but the very small second generation was of little, if any, economic importance in the Georgia peach belt this year. On account of

the increase in the curculio population, we anticipate a heavy infestation in 1933 if there is no more than the usual mortality during hibernation.

PEAR

TARNISHED PLANT BUG (Lygus pratensis L.)

Washington. E. J. Newcomer (September 20): Examination of Bartlett pears in an orchard in Yakima County that has been troubled for some years with this pest showed that over 15 per cent of the pears were made unmarketable by the feeding and oviposition punctures of the bugs.

CHERRY

SHOT-HOLE BORER (Scolytus rugulosus Ratz.)

Indiana. J. J. Davis (September 27): The shot-hole borer was reported from Indianapolis and Shelbyville the latter part of August. At the latter place, on August 29, they were injuring cherry leaf buds.

Ohio. T. H. Parks (September): More than the usual number of complaints of injury to peach and cherry have been received this summer, probably owing to the extended period of drought.

Alabama. J. M. Robinson (September 22): The shot-hole borer is very abundant in Fairfield in Chinaberry.

Utah. G. F. Knowlton. (August 11): Large numbers of adults emerging from wood of apricot trees in Willard.

PLUM

A PYRALID (Mineola scitulella Hulst)

Idaho. R. W. Haegele (September 21): Loss from the destructive prune worm is as great as ever in southwestern Idaho, with increased damage in some orchards.

RASPBERRY

RASPBERRY CANE BORER (Oberea bimaculata Oliv.)

Minnesota. A. G. Ruggles and assistants (September): The raspberry cane borer is very abundant on red raspberries in Hennepin County.

Mississippi. C. Lyle (September 23): Larvae tentatively identified as O. bimaculata were collected from Youngberry plants at Wiggins, Stone Co., on September 5.

BLACK-HORNED TREE CRICKET (Oecanthus nigricornis Walk.)

Indiana. J. J. Davis (September 27): The common tree cricket egg punctures were reported common in raspberry canes at Darlington.

GRAPE

GRAPE LEAFHOPPER (Erythroneura comes Say)

Kentucky. M. L. Didlake (August 30): Leafhoppers on grape caused severe injury, to point of defoliation, in central and eastern Kentucky.

Utah. G. F. Knowlton (September 13): Grape leafhoppers are causing serious damage to ornamental Virginia creepers in many parts of northern Utah. In some cases the leaves have all fallen from the vines. Serious browning and spotting of the leaves, with less extensive leaf fall, is common.

California. S. Lockwood (September 21): The grape leafhopper, as last year, has been responsible for considerable loss to the vineyardists of California from Sacramento south into Kern County. However, the damage has been more localized than last year and not so severe as the past season except in a few vineyards.

GRAPE LEAF FOLDER (Desmia funeralis Hbn.)

Kentucky. M. L. Didlake (August 30): The grape leaf folder is abundant in western Kentucky.

PACIFIC RED SPIDER (Tetranychus pacificus McG.)

California. S. Lockwood (September 21): The spider mite T. pacificus this year has extended its range on European types of grapes from San Joaquin and Stanislaus Counties, where it has been known before, to individual vineyards in Fresno, Tulare, and Kern Counties, although it may be that some of this damage in the southern counties has occurred from the feeding of another unknown mite.

PECAN

PECAN LEAF CASE BEARER (Acrobasis palliolella Rag.)

Georgia. J. B. Gill (September 25): A very heavy infestation of the pecan leaf case bearer has occurred in many pecan orchards in southern Georgia. The immature larvae are now going into hibernation by constructing hibernacula on the buds.

Mississippi. C. Lyle and assistants (September): Leaf case bearers are moderately abundant on pecan at Ocean Springs.

PECAN PHYLLOXERA (Phylloxera devastatrix Perg.)

Mississippi. C. Lyle and assistants (September): On August 31 a heavy infestation was observed on a large pecan tree near Utica.

CITRUS

CITRUS MEALYBUGS (Pseudococcus spp.)

California. H. J. Ryan (September 26): Citrus mealybugs (Pseudococcus citri Risso) have been noted from several localities as more prevalent than for several years.

also P. maritimus Ehrh. and P. adonidum L. Liberations of Cryptolaemus montrouzieri Muls. were necessary in some parts of Los Angeles County for these species. The citrophilus mealybug (P. gahani Green) has been scarce all season with no damage reported. This is believed entirely due to the Australian parasites Coccophagus gurneyi Comp. and Tetracnemus pretiosus Timb., sucessfully introduced by the University of California Citrus Experiment Station.

BLACK SCALE (Saissetia oleae Bern.)

California. H. J. Ryan (September 26): The black scale was fully 30 days late in completing its hatch throughout Los Angeles County. Ordinarily fumigation can be started in some districts by July 1. This year the delayed hatch made it necessary to postpone treatment until after August 1. Areas where work ordinarily begins July 15 were not able to start until after August 15.

CALIFORNIA RED SCALE (Chrysomphalus aurantii Mask.)

California. H. J. Ryan (September 26): Infestations are lighter this season as compared with the last three years. This is generally thought to be due to normal cool temperatures last winter which evened the broods so that control measures this season were more effective than in previous seasons.

COTTONY-CUSHION SCALE (Icerya purchasi Mask.)

Georgia. J. B. Gill (September 25): Within the past three weeks we have had several reports of infestations in various localities in southern Georgia. Ornamental plants, especially Pittosporum and spiraea, are infested.

CITRUS WHITEFLY (Dialeurodes citri Riley & How.)

California. H. J. Ryan (September 26): A new infestation was found by survey crews in August about 4 miles northeast of the Pasadena infestation found last summer. Infestations were found on two adjoining city blocks. Detailed survey of the entire Pasadena area has not been completed and it seems probable that the existing infestations have been limited.

TRUCK-CROP INSECTS

BLISTER BEETLES (Meloidae)

Delaware. L. A. Stearns (August 29): Blister beetles, Epicauta marginata Fab., reported at Bridgeville on swiss chard and potatoes.

Maryland. E. N. Cory (September 22): The black blister beetle, E. pennsylvanica DeG., was reported as general, attacking gladiolus and dahlias.

Virginia. H. G. Walker and L. Anderson (September 26): Several species of blister beetles are rather abundant and have been causing some damage to ornamentals and truck crops at Norfolk.

North Carolina. W. A. Thomas (September 17): The striped blister beetle, E. vittata Fab., has recently become fairly numerous on many farms in the Chadbourn area. The principal damage occurs on Irish potatoes, tomatoes, collards, and fall turnips. Most of the farmers are hand-picking as a means of control.

South Carolina. A. Lutken (September 24): Margined blister beetles, E. marginata, have been destructive in gardens during the month.

Indiana. J. J. Davis (September 27): Blister beetles were [illegible] reported abundant at Bryant, September 15, with no information on host or species. E. vittata were destructive to potatoes at Inglefield, August 29, and to cabbage at Jasper September 7.

Kansas. H. R. Bryson (September 21): These insects have been rather abundant in gardens, not only in the northern and western parts of the State but also in eastern Kansas. Two reports, one from Onaga in Pottawatomie County, and one from Muscotah in Atchison County, record injury to tomatoes and potatoes particularly.

Mississippi. C. Lyle and assistants (September 17): Blister beetles are very abundant at Ocean Springs on Clematis. The striped blister beetle, E. vittata, is abundant over the seven northwest counties of the State. Blister beetles (E. marginata) were very abundant on Irish potatoes at Lexington, Holmes Co., on September 17. (Abstract, J.A.H.)

BANDED CUCUMBER BEETLE (Diabrotica balteata Lec.)

Louisiana. C. E. Smith and C. O. Hopkins (September 9): The banded cucumber beetle was moderately abundant on snap beans in St. Martin Parish.

Mississippi. C. Lyle and assistants (September 20): The banded cucumber beetles are attacking sweetpotato vines in the vicinity of Agricola, almost causing defoliation. (September 16): Banded cucumber beetles are very numerous at Perkinston and Wiggins, causing heavy injury to beans. (Abstract, J.A.H.)

Alabama. J. M. Robinson (September 22): The belted bean beetle is very abundant on lima beans and corn silks in Ramer; on peas and other vegetables, okra, and beans in Auburn (greatest abundance in Auburn since 1926); on vegetables in Atmore.

POTATO AND TOMATO

COLORADO POTATO BEETLE (Leptinotarsa decemlineata Say)

Florida. J. R. Watson (September 24): The Colorado potato beetle is moderately abundant on peppers and eggplant in Alachua County.

Colorado. G. M. List (September 20): The Colorado potato beetle is more numerous than usual in the eastern half of the State.

POTATO FLEA BEETLE (Epitrix cucumeris Harr.)

Colorado. G. M. List (September 20): The potato flea beetle is more numerous than usual. Considerable tuber injury is being found, especially in Weld and Morgan Counties. In other portions of the State the tuber injury is not serious, but in some localities, especially in the southwestern part of the State,, the foliage injury has been more extensive than usual.

TOBACCO WORM (Phlegethontius quinquemaculatus Haw.)

Iowa. C. N. Ainslie (August 24): This species, usually present in limited numbers, has been abundant this season in Sioux City and has done much injury to potatoes and tomatoes, especially the latter. Commercial growers have been compelled to hand-pick the larvae to save the vines from destruction. The adults are very numerous this summer, feeding on flowers.

POTATO LEAFHOPPER (Empoasca fabae Harr.)

Wisconsin. E. L. Chambers (September 27): The potato leafhopper was very serious in some of the potato growing areas of northern Wisconsin, resulting in maturing the potatoes several weeks in advance of those sprayed.

LEAF-FOOTED BUG (Leptoglossus phyllopus L.)

South Carolina. F. Sherman (September 24): The leaf-footed plant bug is abnormally abundant and destructive on tomatoes in weedy gardens.

Mississippi. C. Lyle (September 23): Specimens of L. phyllopus were received from Itta Bena, Leflore County, on September 3, with a report that they were abundant on tomatoes.

TOMATO STILT BUG (Jalysus spinosus Say)

Nebraska. M. H. Swenk (August 25--September 20): A tomato grower in Nance County reported during the last week in August that the spined stilt bug had caused severe damage to his crop by probing into the tomato blossoms and causing them to wither and fall off.

TOMATO PSYLLID (Paratrioza cockerelli Sulc)

Colorado. G. M. List (September 20): The injury from the potato psyllid became more apparent as the season advanced. In previous years the injury has been confined mostly to the early potatoes, but this season many of the late ones are seriously damaged. A recent survey has shown it to exist in all sections of the State.

RING-LEGGED EARWIG (Anisolabis annulipes Lucas)

Mississippi. C. Lyle (September 23): Irish potatoes infested were received from Hazlehurst, Copiah Co., on September 16.

BEANS

MEXICAN BEAN BEETLE (Epilachna corrupta Muls.)

Maine. C. R. Phipps (September 22): The Mexican bean beetle is moderately abundant.

New Hampshire. L. C. Glover (September 22): The Mexican bean beetle has been reported from 39 towns. The injury was severe in many cases. The towns reported range from the east to the west boundary of the State and from the south boundary north to Alton in the east center of the State and Lebanon on the west boundary.

Connecticut. B. H. Walden (September 24): The Mexican bean beetle is very abundant.

New York. N. Y. State Agr. Expt. Sta. (September 1): The Mexican bean beetle is moderately abundant in the western part of the State (Chautauqua and Erie Counties).

Pennsylvania. J. N. Knull (September 1): The Mexican bean beetle is very abundant.

Virginia. H. G. Walker (September 27): The Mexican bean beetle is from moderately to very abundant in Norfolk.

North Carolina. W. A. Thomas (September 15): There seems to be considerably more activity on cowpeas this season than heretofore. There has been a very heavy infestation in the Chadbourn area, and with the dying off of the spring and summer crops of beans, the insects seem to have transferred much more readily to cowpeas than heretofore. The injury to cowpeas, while not serious, is more or less conspicuous and has resulted in many of the growers reporting this injury.

South Carolina. A. Lutken (September 24): The Mexican bean beetle is moderately abundant in general.

Georgia. O. I. Snapp (August 30): Beans in a large field at Marshallville were damaged considerably. The insect was more abundant than usual in this locality during the late summer.

Ohio. T. H. Parks (September 21): Injury from the Mexican bean beetle continues to be severe in all parts of the State.

Indiana. J. J. Davis (September 27): The Mexican bean beetle has been destructive farther north in Indiana than in any previous year, doubtless the result of the mild winter of 1931-32.

Illinois. W. P. Flint (September 22): This insect has been causing appreciable damage to late beans in the east central part of the State.

Alabama. J. M. Robinson (September 22): The Mexican bean beetle is very abundant; general over northeastern portion of the State, Auburn and Wetumpka.

Colorado. G. M. List (September 20): The Mexican bean beetle has been a problem farther east from the foothill sections of the mountains this year than usual. Rather serious loss has occurred in a number of these sections that have hardly experienced the pest before. The infestation was heavy in LaPlata and Montezuma Counties in the southwestern part of the State, but less than usual in the counties just north of this.

New Mexico. J. R. Eyer (September 1): The Mexican bean beetles are giving us considerable trouble this season.

BEAN LEAF BEETLE (Cerotoma trifurcata Forst.)

North Carolina. W. A. Thomas (September 20): Adults have riddled much of the foliage on both beans and peas during the past few weeks. They seem to be exceptionally abundant for this period of the year and not only attack the foliage but the young beans as well. Attacking beans and cowpeas at Chadbourn.

LESSER CORN STALK BORER (Elasmopalpus lignosellus Zell.)

Louisiana. C. E. Smith and C. O. Hopkins (September 9): The larvae did considerable damage to young snap beans in several fields examined in St. Martin Parish.

Mississippi. C. Lyle (September): Injured cowpea plants were received from Columbia, Marion Co., on September 10.

YELLOW-STRIPED ARMYWORM (Prodenia ornithogalli Guen.)

California. E. O. Essig (September 1): About 4,000 acres of blackeye beans infested in lower San Joaquin Valley (Merced, Stanislaus, and San Joaquin Counties) by second-brood worms, August 29-30. Serious injury to setting beans.

LIMA BEAN VINE BORER (Monoptilota pergratialis Hulst)

North Carolina. W. A. Thomas (September 16): The swellings on the bean vines caused by the larvae of this insect were found to be very abundant on a small garden plot of pole lima beans in the vicinity of Chadbourn. For

several years past this insect has not been present to any considerable extent in this area, but for some reason a heavy infestation is now developing.

BEAN LEAF ROLLER (Goniurus proteus L.)

Florida. J. R. Watson (September 24): The bean leaf roller is rather abundan and damaging beans.

A LEAFHOPPER (Empoasca filamenta DeL.)

Utah. G. F. Knowlton (September 13): This leafhopper is abundant on potatoes at Logan.

POTATO LEAFHOPPER (Empoasca fabae Harr.)

Florida. J. R. Watson (September 24): Bean leafhoppers are causing much trouble to beans; they are very abundant over all Florida.

GREEN STINK BUG (Acrosternum hilaris Say)

Kentucky. M. L. Didlake (August 30): The green stink bug is injuring lima bean pods in Shelby County.

BEAN THRIPS (Heliothrips fasciatus Perg.)

California. S. Lockwood (September 21): During August and September the bean thrips has been responsible for rather severe but localized damage to beans in the San Joaquin Valley. Near Westley in Stanislaus County approximately 1,200 acres have been defoliated to a marked degree. In Sutter County this insect, while present on all types of beans, has not been so severely injurious as in Stanislaus County but has dropped from 10 to 20 per cent of the leaves in some areas.

CABBAGE

HARLEQUIN BUG (Murgantia histrionica Hahn)

Virginia. H. G. Walker and L. D. Anderson (September 27): The harlequin bug, as reported last month, continues to be very injurious to cruciferous crop in tidewater Virginia. Several fields of kale, cabbage, and collards have been completely destroyed by this pest.

Maryland. E. N. Cory (September 22): The harlequin bug is reported as presen generally, attacking cabbage.

Ohio. T. H. Parks (September 20): Complaints are still being received about injury to cabbage from this insect. All of these complaints come from counties in southern Ohio from Cincinnati to Marietta.

Indiana. J. J. Davis (September 27): The harlequin bug has had a wider distr bution and more abundant in Indiana than ever before recorded. Until this year we have never had records in Indiana north of the tier of counties along the Ohio River. The last of August and in early September we had

reports of abundance and injury from Washington, New Albany, Bloomfield, and Indianapolis.

Illinois. W. P. Flint (September 22): The harlequin bug continues to be received from various species of Cruciferae.

Kentucky. M. L. Didlake (August 30): The harlequin bug is very abundant everywhere.
W. A. Price (September 26): The harlequin bug continues to be prevalent generally over the State.

Kansas. H. R. Bryson (September 15): One report from Ford records the harlequin bug as abundant in gardens.

Alabama. J. M. Robinson (August): The harlequin bug is from moderately to very abundant in Leeds and Tuscaloosa. (September 22): The harlequin bug is moderately abundant in Tuscaloosa and Straven on collards.

Mississippi. C. Lyle (September 23): Severe injury to turnips and mustard was reported from Verona, Lee County, on September 1, and from Jackson, Hinds County, on September 9.

New Mexico. J. R. Eyer (September 1): The harlequin bug is giving us considerable trouble this season.

CABBAGE WEBWORM (Hellula undalis Fab.)

Virginia. H. G. Walker and L. D. Anderson (September 27): The cabbage webworm is causing considerable damage in some fields of cruciferous crops in the Norfolk area.

North Carolina. W. A. Thomas (September 19): The cabbage webworms are already seriously injuring various cruciferous crops in the vicinity of Chadbourn. Summer collards are being injured by the larvae boring in the bud and leaf petioles. Turnips and other fall crops of this type are being destroyed over much of the Chadbourn area.

South Carolina. A. Lutken (September 24): Cabbage webworms have been abundant on collards, turnips, and cabbage.

Mississippi. C. Lyle (September 23): Specimens were received from Jackson, Hinds County, on September 12, with a report that turnips and mustard in a home garden had been practically ruined by them.

DIAMOND-BACK MOTH (Plutella maculipennis Curt.)

Virginia. H. G. Walker and L. D. Anderson (September 27): The diamond-back moth population is building up rapidly at Norfolk and will undoubtedly cause considerable damage unless the parasites or the weather conditions check its rapid multiplication.

CABBAGE LOOPER (Autographa brassicae Riley)

Virginia. H. G. Walker and L. D. Anderson (September 27): The cabbage looper, and the imported cabbage worm (Ascia rapae L.) have caused considerable damage in some early cabbage fields at Norfolk, but in general they have not been very injurious during the past month.

Illinois. L. H. Shropshire (September 19): Cabbage loopers are abundant and causing considerable damage in northern Illinois.

Louisiana. C. E. Smith and P. K. Harrison (September 13): Summer crucifer crops were severely injured in part by the cabbage looper in the vicinity of Baton Rouge during August and early September.

CROSS-STRIPED CABBAGE WORM (Evergestis rimosalis Guen.)

Louisiana. C. E. Smith and P. K. Harrison (September 13): The cross-striped cabbage worm was one of the major species which severely damaged summer crucifers in the vicinity of Baton Rouge during August and early September.

SQUASH

SQUASH BUG (Anasa tristis DeG.)

Indiana. J. J. Davis (September 27): Squash bugs were reported abundant early in September from Jeffersonville, Lafayette, and Lowell.

Illinois. L. H. Shropshire (September 19): Squash bugs are abundant but causing little injury. Adults are now seeking winter quarters in northern Illinois.

Kentucky. M. L. Didlake (August 30): Squash bugs are very abundant.

Wisconsin. C. L. Fluke (September 26): The squash bug is moderately abundant in Vernon, LaCrosse, Grant, Jefferson, and Sauk Counties, on squash.

New Mexico. J. R. Eyer (September 1): Squash bugs are giving us considerable trouble this season.

PICKLE WORMS (Diaphania spp.)

North Carolina. W. A. Thomas (September 17): The pickle worm (D. nitidalis Stoll) and the melon worm (D. hyalinata L.) have developed a rather heavy infestation within the past few days and are very noticeable on late summer squash at Chadbourn. The young fruit is being entered by the pickle worm and some of the plants are almost defoliated by the melon worm.

SQUASH BORER (Melittia satyriniformis Hbn.)

Illinois. L. H. Shropshire (September 19): Injury by the squash vine borer exceeds that done by the squash bug. Most of the borers have left the plants and may be found in cocoons at the base.

SWEETPOTATO

SWEETPOTATO WHITEFLY (Bemisia inconspicua Quaint.)

Florida. E. W. Berger and G. B. Merrill (September 15): The sweetpotato whitefly is moderately to very abundant in Alachua and several adjoining counties, and probably in many sections of the State.

TORTOISE BEETLES (Cassidinae)

Mississippi. C. Lyle and assistants (September): There have been reports of serious injury to sweetpotato by tortoise beetles in the north-central part of the State. (Abstract, G.M.)

BEETS

BEET LEAFHOPPER (Eutettix tenellus Bak.)

Idaho. R. W. Haegele (September 21): The desert populations in southern Idaho are somewhat higher than in 1931, but are still much lower than in the years 1927 to 1930, inclusive. The spring and summer populations were sufficiently low to result in very little curly-top damage to beets. The tomato crop in southwestern Idaho is free from blight owing to scarcity of beet leafhoppers.

Utah. G. F. Knowlton (September 23): The beet leafhopper is doing little damage in most localities in northern Utah.

F O R E S T A N D S H A D E - T R E E I N S E C T S

RUSTY TUSSOCK MOTH (Notolophus antiqua L.)

Alaska. Geo. M. Pilcher (July 25): There are millions of caterpillars spreading out fan-wise in a district not more than 2 by 3 miles (about 8 miles back in the hills from the Yukon River at Marshall), the center being within one-half mile of Fortuna Ledge (Post Office). They have invaded my garden at this place, but have done no real damage. There may be other localities infested, but I do not know of them. I first discovered the caterpillars in a blueberry patch in the Wilson Creek Valley, July 10. I found places untouched by them and other spots where they were so thick that I counted from 10 to 20 on a clump of bushes that I could cover with my hat. I found no bush that had lost half its leaves. On July 24 I went over the same section and many berry bushes were completely devoid of leaves, and cocoons were hanging on bare twigs and stems everywhere. Willow, particularly pussy willow, is being stripped. In my garden the caterpillars have slightly infested radishes and turnips, and severely infested rhubarb grown just outside the garden.

PALE TUSSOCK MOTH (Halisidota tessellaris S. & A.)

Massachusetts, Connecticut, and New Hampshire. J. V. Schaffner, jr. (September 24): In various localities through southern New Hampshire, eastern Massachusetts and northern Connecticut we have found larvae very common in oak and mixed woodlands and on shade trees.

FALL WEBWORM (Hyphantria cunea Drury)

North Carolina. W. A. Thomas (September 15): This insect is very abundant at Chadbourn, causing the defoliation of pecan, walnut, and various forest trees. Their unsightly nests are conspicuous in the forests along the highway.

South Carolina. A. Lutken (September 24): The fall webworm was abundant on persimmons in Beaufort County the last of August.

Georgia. J. B. Gill (September 25): The fall webworm has shown up in conside able numbers in pecan orchards in scattered localities in the southern portion of Georgia.

Ohio. T. H. Parks (September 20): Injury and defoliation have been very seve in Columbus. Some shade trees have been almost defoliated and the worms are now attacking shrubs and hedges.

Kentucky. W. A. Price (September 26): The fall webworm has caused considerab damage to shade trees in Louisville, Lexington, and Shelbyville.

Mississippi. C. Lyle and assistants (September): The fall webworm is very abundant on pecan, persimmon, sweet gum, and other trees in Hinds, Madison Claiborne, and Rankin Counties. The worms were first noticed about the latter part of August.

A FALL WEBWORM (Hyphantria textor Harr.)

New England and New York. E. P. Felt (September 23): The fall webworm H. textor has been very abundant here and there upon forest trees in south-western New England and southeastern New York.

New Hampshire. L. C. Glover (September 22): The fall webworm is very abundan It has been noted on several species of trees, especially apple.

Vermont. H. L. Bailey (September 27): Fall webworms are moderately abundant, less so than 1931.

Connecticut. M. P. Zappe (September): Appears to be very abundant--probably more so than average.

Rhode Island. A. E. Stene (September 28): The fall webworm is again abundant although in some places perhaps not quite so numerous as last year.

Pennsylvania. J. N. Knull (September 14): The fall webworm H. textor is very abundant in the upper part of Dauphin County along the Susquehanna River. Many trees have been entirely defoliated.

WALNUT CATERPILLAR (Datana integerrima G. & R.)

Maryland. E. N. Cory and staff (September 22): The walnut caterpillar is present generally on walnut and pecan over Maryland.

Georgia. J. B. Gill (September 25): There has been a rather light infestatio in pecan orchards of Georgia during the present season.

Ohio. T. H. Parks (September 21): Walnut datanas are bad and far above avera Many walnut trees have been partially defoliated.

Louisiana. C. E. Smith and C. O. Hopkins (September 9): A number of pecan trees of considerable size which had recently been defoliated were observed in Pointe Coupee, St. Landry, and St. Martin Parishes.

Mississippi. C. Lyle and assistants (September): Serious damage to pecan trees has been noted in Adams and Wilkinson Counties, where about 75 per cent of the trees are completely defoliated. Slight damage to pecans was noted in Pike County.

YELLOW-NECKED CATERPILLAR (Datana ministra Drury)

Vermont. H. L. Bailey (September 27): Yellow-necked apple tree caterpillar is abundant in the western part of the State. Noted a row of small elms in Shelburne practically defoliated.

EASTERN TENT CATERPILLAR (Malacosoma americana Fab.)

Iowa. C. N. Ainslie (September 12): An unusual outbreak of two species, M. americana and M. disstria Hbn., is appearing on various trees in the area near Sioux City, apple, elm, and boxelder being very generally attacked. The pests are sporadic, some localities showing heavy infestation, others but little. Little interest is being shown in the easily applied control measures.

WALKINGSTICK (Diapheromera femorata Say)

Maine. H. B. Peirson (August 26): Two walkingsticks were received from Agamenticus, August 26.

Pennsylvania. J. N. Knull (September 18): An infestation of walkingsticks was observed in Bear Valley, west of Upper Strasburg, Franklin County. Many of the forest trees, especially the lindens, were severely defoliated.

PIGEON TREMEX (Tremex columba L.)

Rhode Island. A. E. Stene (September 28): An insect rarely reported in previous years, the pigeon tremex has been sent in from several sections of the State this year, indicating that it is probably unusually abundant.

BIRCH

BIRCH SKELETONIZER (Bucculatrix canadensisella Chamb.)

Maine and New Hampshire. J. V. Schaffner, jr. (September 24): Severe infestations have been reported in southern parts of New Hampshire and Maine.

Maine. H. B. Peirson (August 26): Birch throughout the northern half of the State is severely attacked.

Pennsylvania. J. N. Knull (September 14): The birch leaf skeletonizer is very abundant in the northeastern part of Pennsylvania. In many places the foliage of the gray birches looks as if it had been killed by fire.

BIRCH LEAF-MINING SAWFLY (Phyllotoma nemorata Fallen)

Maine. H. B. Peirson (August 26): There is a heavy outbreak throughout the State of the birch sawfly leafminer. It is more severe than last year.

Vermont. H. L. Bailey (September 27): The birch leaf miner is very abundant in northern sections of the State.

BIRCH LEAF MINER (Fenusa pumila Klug)

Maine. H. B. Peirson (August 26): The birch leaf miner is attacking black birch (Betula lenta) in Augusta.

BOXELDER

BOXELDER BUG (Leptocoris trivittatus Say)

Indiana. J. J. Davis (September 27): The boxelder bug has been unusually abundant in the northern half of Indiana since September 9. In most cases they were reported as abundant on boxelder but in some cases they were reported primarily as annoying pests.

Wisconsin. E. L. Chambers (September 27): Boxelder bugs have again appeared in large numbers throughout the State and are resulting in many inquiries concerning the possibility of their doing injury in homes or similar places where they are found crawling about.

Minnesota. A. G. Ruggles (September 26): Boxelder bugs are more numerous even than they were in 1931.

CATALPA

CATALPA SPHINX (Ceratomia catalpae Bdv.)

Kentucky. M. L. Didlake (August 30): The catalpa sphinx is defoliating trees in Fayette, Franklin, Shelby, and Jefferson Counties.

ELM

ELM LEAF BEETLE (Galerucella xanthomelaena Schr.)

Maine. H. B. Peirson (August): The elm leaf beetle is reported from the southern third of the State. This insect appears to be on the increase.

New Hampshire. L. C. Glover (September 22): The second generation of the elm leaf beetle has done a moderate amount of damage to elms in the County of Strafford around Durham, Dover, Strafford, Exeter, and Portsmouth. A little feeding was noted north of Rochester.

Connecticut and Rhode Island. E. P. Felt (September 23): Eggs and young larvae were found in mid-August at Cranston, R. I., and Mystic, Conn., indicating a probable second brood. Reports of serious injury in many of the older towns in Connecticut, notably Guilford, Branford, Madison, Lyme, and Saybrook, have been received. There has been very general defoliation in many areas in southern Westchester County.

California. A. C. Browne (September 3): When in 1923 the elm leaf beetle was first found in California, some concern was felt that in its new environment it might find some crop of economic importance that would prove to its liking.

Later observations seemed in a measure to confirm the early suspicions when the beetle was found feeding on the foliage of almonds near Tulare. Subsequent observations have not revealed any special tendency to feed on this host, which would seem to indicate that the choice had been promoted through lack of other suitable material. On August 15, 1932, what seemed to be elm leaf beetles, was reported attacking a planting of Kentucky Wonder beans at Dutch Flat. Investigation confirmed the suspicions when numerous adults were taken from the completely riddled leaves of the bean plants. Some large elms standing across the road and about 400 feet away had been defoliated by the beetles, which had then selected the near-by beans.

ELM SPANWORM (Ennomos subsignarius Hbn.)

Pennsylvania. J. N. Knull (September 14): During the season just passed there have been heavy infestations in the northeastern part of Pennsylvania. In many places the foliage of the forest trees has been severely injured.

ELM LACEBUG (Corythucha ulmi O. & D.)

New York. E. P. Felt (September 23): The elm lacebug was reported as injurious to elms at Amenia, the insect having been prevalent for the past four or five years.

FIR

SPRUCE SAWFLY (Neodiprion abietis Harr.)

Maine. H. B. Peirson (September 6): Some fir was heavily infested with the spruce sawfly in Martin, while some spruce in the same stand was not affected. This seems to be the usual case in Maine even though the name indicates otherwise.

AN APHID (Dreyfusia picea Ratz.)

Maine. H. B. Peirson (August 22): Fir on Monhegan Island, situated about 15 miles off the mainland, is heavily infested with the fir bark louse.

GUM

SOUR GUM CASE BEARER (Antispila nyssaefoliella Clem.)

Pennsylvania. J. N. Knull (September 15): The sour gum case-cutter is abundant in different parts of Pennsylvania.

HICKORY

TWIG GIRDLER (Oncideres cingulatus Say)

Pennsylvania. J. N. Knull (September 18): The twig-girdler has been very abundant in Franklin County this fall.

HICKORY AGRILUS (Agrilus otiosus Say)

Connecticut. E. P. Felt (September 23): The hickory agrilus is somewhat prevalent upon hickories at Stamford, causing characteristic dying tips bearing a few leaves.

LOCUST

LOCUST LEAF MINER (Chalepus dorsalis Thunb.)

Pennsylvania. J. N. Knull (September 1): The locust leaf miner is abundant in parts of Fayette and Westmoreland Counties.

MAPLE

GREEN-STRIPED MAPLE WORM (Anisota rubicunda Fab.)

Kansas. H. R. Bryson (September 26): This insect has caused considerable defoliation of maple trees in certain localities. The second generation is causing defoliation of a grove near Denton.

WOOLLY MAPLE LEAF SCALE (Phenacoccus acericola King)

Pennsylvania. J. N. Knull (September 22): This insect was found infesting sugar maple in Philadelphia.

OAK

ORANGE-STRIPED OAK WORM (Anisota senatoria S. & A.)

Vermont. H. L. Bailey (September 27): The yellow-striped oak caterpillar is very abundant in Charlotte and vicinity.

Massachusetts, Rhode Island, and Connecticut. J. V. Schaffner, jr. (September 24): This species was reported as abundant on oaks near Dennis, Mass.; Groton, Preston and Ledyard, Conn., and Westerly, R. I. The infestation at Ledyard was reported to extend over at least 1-square mile.

Pennsylvania. J. N. Knull (September 15): The yellow-striped oak caterpillar has been abundant on various species of oaks in Franklin County.

Virginia. C. R. Willey (September 26): This caterpillar seems more abundant in the forests this fall than usual.

CALIFORNIA OAK MOTH (Phryganidia californica Pack.)

California. E. O. Essig (September 1): In Alameda and Contra Costa Counties liv oaks are completely defoliated in certain areas. The second brood occurred during the month of August. (September 22): The insect continues to be very destructive to oaks in the San Francisco Bay Region.

OAK TWIG PRUNER (Hypermallus villosus Fab.)

Massachusetts. E. P. Felt (September 23): The oak twig pruner is reported as very abundant in Martha's Vineyard.

Pennsylvania. J. N. Knull (September 18): The oak twig pruner has been very abundant in wooded areas in Franklin County this year.

PINE

EUROPEAN PINE SHOOT MOTH (Rhyacionia buoliana Schiff.)

Delaware. L. A. Stearns (August 26): The European pine shoot moth is present in Harrington on yellow pine.

SOUTHERN PINE BEETLE (Dendroctonus frontalis Zimm.)

Southeastern United States. R. A. St. George (September 26): During September additional outbreaks of the southern pine beetle have reached this office. Upon an investigation a serious infestation was found at Farmington (10 miles west of Winston-Salem), N. C. Several acres of fine virgin shortleaf pine timber were being killed. The trees would cut about 30,000 board feet per acre, a very high yield for this locality. The attack started about July 1 and the brood which emerged continued to enlarge the infested area. About 200 newly infested trees were found when the tract was examined September 1. Outbreaks of this beetle during the season 1932 have been reported from the following States: Virginia, North Carolina, South Carolina, Georgia, Florida, Mississippi, and Arkansas. In general the beetle has been more active in the Piedmont and Coastal Plain regions than has been the case for several years. The previous outbreaks were confined more to the mountainous and, to a lesser extent, to the Piedmont regions. The only activity this year noted in the mountainous area was within a 25 mile radius of Asheville, N. C. A recent reconnaissance study of the Smoky Mountain National Park revealed no indications of activity this season, quite in contrast to the situation in 1931.

Kentucky. W. A. Price (September 26): The southern pine beetle is injuring pines at Louisville and Lexington.

A CONE BEETLE (Conophthorus coniperda Schwarz)

Connecticut. E. P. Felt (September 23): The pine cone beetle is reported abundant on white pine at Danbury.

RED-HEADED PINE SAWFLY (Neodiprion lecontei Fitch)

Maine. H. B. Peirson (September 6): The red-headed pine sawfly is attacking red pine at Portland.

PINE BARK APHID (Pineus strobi Htg.)

Connecticut. M. P. Zappe (September): Chermes pinicorticis Fitch appears to be very much less abundant than it has been for several years. Nursery trees are practically clean, and the insect has been found on only a few occasions where normally it is quite abundant where white pine is grown.

POPLAR

COTTONWOOD LEAF BEETLE (Chrysomela scripta Fab.)

Pennsylvania. G. L. Varney (August 22): Samples of a leaf-eating beetle which is rapidly assuming epidemic stages on the young aspen or Populus tremuloide stands on the Allegheny National Forest at Marienville.

WILLOW CURCULIO (Cryptorhynchus lapathi L.)

Minnesota. A. G. Ruggles (September 26): Abundant on poplar near Savage; reported previously from Rochester.

SPRUCE

EASTERN SPRUCE BEETLE (Dendroctonus piceaperda Hopk.)

Maine. H. B. Peirson (September 6): An outbreak is occurring in Township 1, Range 7, and considerable virgin spruce is being destroyed.

RED TURPENTINE BEETLE (Entomoscelis adonidis Pal.)

Maryland. E. N. Cory (September 22): The red turpentine beetle is present in Easton on silver spruce.

SPRUCE BUDWORM (Harmologa fumiferana Clem.)

Wisconsin. E. L. Chambers (September 27): The spruce budworm continued its ravages in several northern Wisconsin counties, defoliating large numbers of pines and spruce trees. One entire section of forest trees was practically completely defoliated in Bayfield County.

SYCAMORE

SYCAMORE LACEBUG (Corythucha ciliata Say)

New England and New York. E. P. Felt. (September 23): The sycamore lacebug ha been unusually abundant and injurious in late summer throughout much of soutl western New England and southeastern New York, the foliage on sycamore sprou being especially favored and somewhat generally discolored.

WILLOWS

ALDER FLEA BEETLE (Haltica bimarginata Say)

Michigan. E. I. McDaniel (August 30): The alder flea beetle is doing serious damage to willows along the shores of Lake Huron, in the vicinity of Bay Cit In some places the beetles have completely stripped the foliage from these trees for miles along the lake shore. The second brood have just emerged and are congregating on the new foliage in swarms.

INSECTS AFFECTING GREENHOUSE AND ORNAMENTAL PLANTS

FULLER'S ROSE BEETLE (Asynonychus godmani Crotch)

Virginia. H. G. Walker and L. D. Anderson (September 27): The Fuller's rose weevil is more abundant than usual and has been reported as injuring a wide variety of plants at Norfolk.

North Carolina. W. A. Thomas (September 12): This insect is now feeding rather abundantly on the foliage of magnolia bay in the wooded areas near the laboratory at Chadbourn. No specimens have been found feeding on cultivated crops this season.

THREE-LINED POTATO BEETLE (Lema trilineata Oliv.)

Pennsylvania. J. N. Knull (September 30): This insect has been destructive to patches of Japanese lantern plants at Mont Alto.

ACHEMON SPHINX (Pholus achemon Drury)

Mississippi. C. Lyle (September 23): Larvae collected from ornamental vines were received from Durant, Yazoo City, and Meridian, during the past few weeks. No appreciable damage was reported.

A MOTH BORER (Heliothis sp.)

North Dakota. J. A. Munro (September 20): Borers, determined as Heliothis sp. by C. Heinrich, were reported to be prevalent in ground cherries in a garden at Brampton, Sargent County.

A WASP (Scolia dubia Say)

Pennsylvania. E. P. Felt (September 23): A parasitic insect, S. dubia, was very abundant on a lawn infested by grubs of both the Japanese beetle (Popillia japonica Newm.) and the green June beetle (Cotinis nitida L.).

CHINESE MANTIS (Tenodera sinensis Sauss.)

Connecticut. E. P. Felt (September 23): The Chinese mantid has been somewhat abundant in Stamford and vicinity, a number of specimens having been taken upon the business streets.

GARDEN CENTIPEDE (Scutigerella immaculata Newp.)

California. A. E. Michelbacher (September 19): The garden centipede has done considerable damage to sweetpeas and snapdragons at Burlingame. The damage was in greenhouses in ground benches. Also, it is believed that the centipede may be doing severe damage to gardenias in raised benches. An examination of the soil in several beds where the plants were doing poorly showed a fair concentration of the pest.

ASTER APHID (Aphis middletoni Thos.)

Nebraska. M. H. Swenk (September 20): The aster aphid was the cause of complaints of damage to asters in Madison County that were received during the first week in September.

BARBERRY

A PYRALID (Omphalocera dentosa Grote)

Connecticut. R. B. Friend (August 30): A number of Japanese barberry bushes in Branford were severely defoliated.

COTONEASTER

LEAF CRIMPLER (Mineola indiginella Zell.)

North Dakota. J. A. Munro (August 18): I am sending a branch of cotoneaster from Fargo that is infested with worms which are evidently skeletonizers. They have caused considerable damage of late to several of these hedges in Fargo. (Det. by C. Heinrich.)

CREPE MYRTLE

CREPE MYRTLE APHID (Myzocallis kahawaluokalani Kirk.)

Mississippi. C. Lyle and assistants (September): Crepe myrtle in the vicinity of Perkinston is very heavily infested.

EUONYMUS

EUONYMUS SCALE (Chionaspis euonymi Comst.)

Virginia. H. G. Walker and L. D. Anderson (September 27): The euonymus scale has been very injurious to euonymus plants in various parts of Tidewater.

Mississippi. C. Lyle and assistants (September): The euonymus scale has been observed in many cases causing the death of shrubs in several instances throughout this district. (Works in Yalobusha, Grenada, and Montgomery Counties.)

GLADIOLI

GLADIOLUS THRIPS (Taeniothrips gladioli M. & S.)

Maine. H. B. Peirson (September 8): The gladiolus thrips is very abundant in Bar Harbor.

Rhode Island. A. E. Stene (September 28): Gladiolus growers are having more trouble than ever with the thrips.

Illinois. W. P. Flint (September 22): The gladiolus thrips has been found at Arlington Heights. This is the first record of this insect in the State.

IRIS

IRIS BORER (Macronoctua onusta Grote)

Maryland. E. N. Cory (September 22): The iris borer is present in Baltimore on iris bulbs.

MAGNOLIA

MAGNOLIA SCALE (Neolecanium cornuparvum Thro)

New York. E. P. Felt (September 23): The magnolia scale was somewhat abundant and injurious to magnolias in Rochester.

PHLOX

PHLOX BUG (Lopidea media Say)

Indiana. J. J. Davis (September 27): The phlox bug was destructive to hardy phlox at Columbus September 8.

ROSES

SUGARCANE BEETLE (Euetheola rugiceps Lec.)

Mississippi. C. Lyle (September 23): Damage to several thousand rose plants in a greenhouse at Columbus by adults was found in early September. The damage had apparently been done early in August. Many of the plants had been gnawed off almost in two just below the ground. It is supposed that the beetles came into the greenhouse in the egg stage when the benches were filled with soil from a near-by pasture. By the time the damage was discovered most of the beetles had escaped from the greenhouse.

TAXUS

BLACK VINE WEEVIL (Brachyrhinus sulcatus Fab.)

Massachusetts and New York. E. P. Felt (September 23): The black vine weevil has been injurious in Milton, Mass., and has caused considerable injury to Taxus in Chappaqua, N. Y.

I N S E C T S A T T A C K I N G M A N A N D

D O M E S T I C A N I M A L S

MAN

EYE GNATS (Hippelates spp.)

Mississippi. R. P. Colmer (September 19): Eye gnats are very numerous in George and Greene Counties.

ROVE BEETLES (Staphylinidae)

Alabama. K. L. Cockerham (September 21): Rove beetles were proving to be a very great nuisance in summer cottages on the seashore near Foley. Great hordes

of them appeared suddenly, came through the screens, and flew to the lights inside of the summer cottages, where they fell upon tables, beds, etc., in great numbers. Residents complained that they were unable to eat with electric lights on since these beetles fell down in the food.

BLACK WIDOW (Lathrodectes mactans Fab.)

Maryland. P. Knight (September 30): We have collected more hour glass spiders in and near College Park. On September 9, I collected one male and one female in my back yard, and today we collected 17 females and two males in about one hour's time. Every trip we have taken for the purpose of finding these animals has been successful, though most of the collections have been females.

SPOTTED-LEGGED MOSQUITO (Psorophora columbiae Dyar & Knab)

Florida. T. E. McNeel (September 21): During the second week in September the worst infestation of mosquitoes ever recorded in this State took place. In the Everglades section of Dade County, above Hialeah, unusual numbers of mosquitoes were observed for the first time on September 4 following a northwest wind which blew for several days. By the 5th mosquitoes increased to unprecedented numbers, and by evening of that day they sounded like swarming bees. During the night, livestock could be heard running and fighting and on the morning of September 6 dead animals were found on farms all over this section. The recorded mortality was 80 head of cattle, 3 horses, 1 mule, 67 hogs, 20 chickens, and 2 dogs. Post mortems showed no mosquitoes in the respiratory apparatus and indicated that the animals died from loss of blood and nervous exhaustion. The chief of the Bureau of Dairy Industry of Miami reported that the milk supply from the Hialeah district was reduced 1,000 gallons per day from the period September 6 to 10 which covered and immediately followed the mosquito outbreak.

H O U S E H O L D A N D S T O R E D - P R O D U C T I N S E C T S

TERMITES (Reticulitermes spp.)

United States. T. E. Snyder (August): During the month of August 129 cases of termite damage to buildings were reported to the Bureau of Entomology. The following list gives the number of cases reported from each section: New England, 4; Middle Atlantic, 40; South Atlantic, 29; East Central, 12; West Central, 9; Lower Mississippi, 29; and Pacific Coast, 5.

ANTS (Formicidae)

Louisiana. C. E. Smith and P. K. Harrison (September 8): The fire ant (Solenopsis geminata Fab.) destroyed stands of cauliflower and cabbage seedlings in two fields observed in the vicinity of Baton Rouge, by girdling the plants near the surface of the ground.